

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 11-269652

(43)Date of publication of application : 05.10.1999

(51)Int.Cl. C23C 16/44  
C23C 16/40  
C23C 18/08  
H01L 21/203  
H01L 21/31

(21)Application number : 10-176197

(71)Applicant : SAMSUNG ELECTRONICS CO LTD

(22)Date of filing : 23.06.1998

(72)Inventor : RI SOMIN  
KIN EIKAN  
PARK CHANG-SOO

(30)Priority

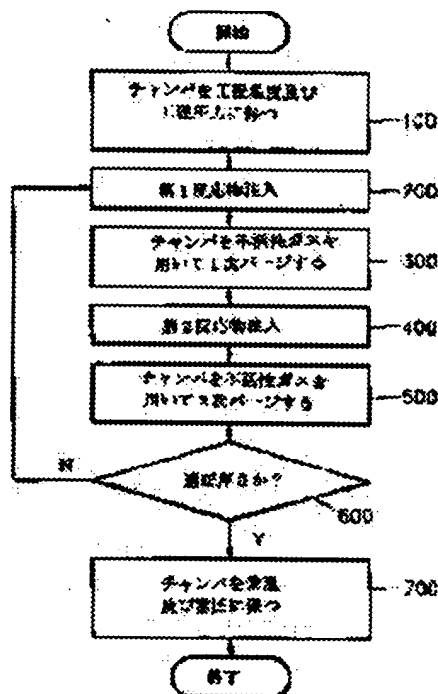
Priority number : 98 9808641 Priority date : 14.03.1998 Priority country : KR

## (54) PRODUCTION OF THIN FILM

(57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a thin film producing method by an atomic layer vapor deposition method.

**SOLUTION:** This method comprises a stage 100 in which the temp. and pressure in a chamber loaded with a substrate are held to prescribed ones, a stage 200 in which a primary reactant is poured into the chamber and is chemically adsorbed on the substrate, a stage 300 in which the chamber contg. the substrate in which chemically adsorbed primary reactant has been formed is primarily purged with an inert gas, and the physically adsorbed primary reactant is left on the chemically adsorbed primary reactant, a stage 400 in which a secondary reactant is poured into the chamber contg. the substrate in which the chemically adsorbed and physically adsorbed primary reactant has been formed and is reacted therewith to form a thin film and a stage 500 in which the chamber in which the thin film has been formed is secondarily purged with an inert gas.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Pat nt numb r]

[Date of registration]

[Number of app al against examiner's decision of r j ction]

[Date of r qu sting app al against xaminer's d cision of rej ction]

[Dat of xtinction of right]